

Amendments to the Specification:

Amendments to the specification are presented below with replacement paragraphs marked up to show changes made relative to the immediate prior version.

Please replace the paragraph on page 4, lines 5-7 with the following amended paragraph:

It is a further object of the invention to provide a craniofacial implant that may be ~~sued~~
used in other applications wherein it is desirable to maintain the shape of the implant.

Please replace the paragraph on page 7, lines 23-27 with the following amended paragraph:

In a preferred embodiment of the invention described above, the polyethylene film is approximately 0.1 mm thick, the titanium mesh is approximately .35 mm thick, and the porous polyethylene is approximately .9 mm thick, inclusive of the ~~imbedded~~ embedded titanium mesh. Thus, the overall thickness of the material is approximately 1 mm.

Please replace the paragraph on page 8, line 28 - page 9, line 6 with the following amended paragraph:

Now referring to Fig. 13, a side sectional view of the implant depicted in Figs. 1-4 shows the mesh 20 formed along the interface 175 between the porous layer and the ~~sold~~ solid polyethylene layer 23. As seen in Fig. 14, a defect in the cranium 178 has a floor 180 and a wall 182. In order to address this defect, the implant is bent to confirm to the contour of the defect and cut to the shape of the defect. The implant is placed within the defect and the

bottom porous layer is brought into contact with the bone on the floor and sidewalls. The implant may be secured into place with screws or sutures. Because the bottom surface and the sidewalls of the implant are porous, fibrovascular ingrowth into the implant is encouraged, and this ingrowth serves to further stabilize the implant and diminish the possibility of rejection. The smooth barrier surface prevents the dermis from attachment and thereby allows the skin to slide over the implant area.

Please replace the paragraph on page 9, line 28 - page 10, line 3 with the following amended paragraph:

Fig. 5 is a sectional view of the implant according to one embodiment of the invention located within a mold. As depicted therein, the mesh is located adjacent to the barrier layer on the top of the mold. The barrier layer is formed of a solid sheet of polyethylene, and the porous section is made by sintering together polyethylene fines under heat and pressure. The solid sheet may be made by introducing polyethylene fines to a press having opposite smooth metal sheets and heating the surfaces causing the fines to completely fuse together. When the implant has cooled, the structure may be removed from the mold because the tabs 50 and implant materials have some flexibility.